Abstract

A field effect transistor is known in which at least one vertically arranged semiconductor column, with a diameter in the nanometer range, is located between a source and a contact and has an annular surround of a gate contact with retention of an insulation gap. A simplified production method is disclosed and the transistor produced thus is embodied such that the semiconductor columns (2) are embedded in a first and a second insulation layer (3, 5), between which a metal layer (4), running to the outside as a gate contact, is arranged, the ends of which, extending upwards through the second insulation layer (5), are partly converted into an insulator (6), or removed and replaced by an insulation material.